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CERCOSPORA VULPINA, E. & K.—On living leaves of *Vitis vulpina*. Manhattan, Ks., Sept., 1887. Kellerman & Swingle, 1081. Spots amphigenous, small (1—2 millim.), subangular, mostly limited by the veinlets, dark brown above, rather paler beneath; hyphæ mostly hypophyllous, fasciculate, pale brown (subfuliginous), continuous or with 1—3 faint septa, distinctly toothed and abruptly bent above, 50—75 x 3—4 *u*; conidia obclavate, smoky-hyaline, nucleate and finally 2—3-septate, curved, 45—60 x 3—4 *u*. This differs essentially from the other viticous species.

SPHÆRELLA SOLIDAGINEA, E. & K.—On dead leaves of *Solidago Canadensis*. Manhattan. (Kellerman & Swingle, 1115.) Peritheria erumpent-superficial, 80—100 *u* in diameter, subglobose, of rather coarse, cellular structure, pierced above, scattered or collected in groups; asci 35 x 9—10 *u*; sporidia biseriate, clavate-oblong, nucleate, slightly constricted near the middle, 20 x 3½ *u*, hyaline.

FUSARIUM PARASITICUM, E. & K.—Parasitic on *Puccinia Seymeriæ*, Burrill. On *S. macrophylla*, Manhattan, Kas., October, 1887. (Kellerman & Swingle, 1104.) Forming a thin, grayish-white layer on the sori of the *Puccinia;* hyphæ short (35 *u*), much branched above; conidia lunate, attenuated and acute at each end, faintly about three-septate, 20—30 x 3 *u*.

CERATOPHORUM ULMICOLUM, E. & K.—On living leaves of *Ulmus fulva*. Manhattan, Kas. (Kellerman & Swingle, 1112.) Maculicolous; spots amphigenous, suborbicular, dirty-brown, with a small, white center, ½—1 cm. across, subconfluent; conidia ventricose-fusoid, attenuated below into a subhyaline, subobtuse, sessile base and prolonged above into a curved, hyaline beak, swollen, dark olivaceous and 5—7-septate in the middle, 60—100 x 11—14 *u*. The conidia are sessile on a small, tubercular, cellular base and form compact tufts, which resemble a *Vermicularia*. The tufts are amphigenous, but perhaps more abundant above and are not confluent but thinly scattered over the spots. This is intermediate in the size of the conidia between *C. helicosporum*, Sacc., and *C. uncinatum*, Clinton, and differs from both of these in its tufted or punctate mode of growth, in which it resembles *C. epiphyllum*, B. & C., which, however, has much smaller, multiseptate conidia. The subhyaline extremities of the conidia are faintly septate and sometimes one or more of the cells in the colored part has a longitudinal septum.

NEW SPECIES OF FUNGI FROM VARIOUS LOCALITIES.

BY J. B. ELLIS AND B. M. EVERHART.

SPHÆRIA (METASPHÆRIA) STENOTHECA, E. & E.—On sheaths of dead culms of *Panicum Curtisii*. Pointe a la Hache, La., February, 1887. Langlois, No. 1028. Perithecia scattered, membranaceous, subovoid, one-fourth millim. in diameter, buried in the matrix except the rather prominent, depressed, conoid apex, which is covered by the blackened cuticle (except the papilliform ostiolum); asci linear, 70—80 x 4—5 *u*, with indistinct paraphyses; sporidia in a single series, with their ends mostly overlapping, oblong-fusiod, 3—4-nucleate, becoming three-septate, subhyaline, 12—16 x 3 *u*. Quite distinct from other graminicolous species in its narrow, linear asci.

SPHÆRELLA STAPHYLINA, E. & E.—On living leaves of *Staphylea trifolia*. Manhattan, Kas., July, 1887. W. T. Swingle. Maculicola; spots amphigenous, irregular, often narrow and elongated, mostly few on a leaf, 2—4 millim, or sometimes 1—1½ cm. and occasionally occupying an entire half of the leaf, causing the affected part to dry up and fall away; perithecia minute, visible on both sides, sublenticular and subastomous, membranaceous, black, 75—100 *u* diameter; asci oblong, sessile, 40—6x12 *u*, without paraphyses; sporidia crowded-biseriate, oblong-elliptical, subinequilateral, one-septate and constricted, yellowish-hyaline, 12—15 x 5 *u*, accompanied by a macrosporium and by smaller stylosporiferous perithecia, containing elliptical, subfuscous, continuous spores, about 5x2½ *u*.

DENDRYPHIUM SUBSESSILE, E. & E.—On dead stems of *Smilax hispida*. Manhattan, Kas., July, 1887. W. T. Swingle. Forming a more or less continuous, thin, black layer on the surface of the stems; hyphæ almost obsolete; conidia concatenate, subsessile, subcylindrical, brown, about five-septate, 25—45 x 6—7 *u*, 2—4-concatenate.

VENTURIA ERYSIPHIOIDES, E. & E.—On dead culms or sheaths of *Panicum Curtisii*. Pointe a la Hache, La., February, 1887. Langlois, No. 1023. Perithecia gregarious, black, globose, about 100 *u* in diameter, broadly perforated above, beset with scattering, rigid, black continuous bristles, 40—70 x 5—6 *u*; asci oblong, sessile, without paraphyses, 40—45 x 7—8 *u*; sporidia crowded, fusiform, hyaline, slightly curved, 5—6-nucleate, about 20 x 2½ *u*. This differs from *V. graminicola*, Winter, in its smaller perithecia (80—110 *u*) with shorter, lateral bristles and its narrower sporidia (2—2½*u*). The number of bristles on a perithecium is generally not over ten or twelve and they stand out horizontally or nearly so, reminding one of some of the *Erysipheæ*.

GLŒOSPORIUM LIRIODENDRI, E. & E.—On leaves of *Liriodendron Tulipiferæ*. Faulkland, Del., August, 1887. A. Commons. Maculicola; epiphyllous; spots ochraceous, round, border darker; acervuli minute, pale, innate; spores oblong, 12—16 x 5 *u*, hyaline, ends obtuse, cirrhi punctiform, minute or, by confluence, larger and flattened, flesh color.

GLOEOSPORIUM DECIPIENS, E. & E.—On living leaves of *Fraxinus Americana*. Manhattan, Kas. July, 1887. W. T. Swingle. This resembles outwardly *G. punctiforme*, E. & E., on leaves of *Fraxinus Americana* from Delaware. The spores, however, are quite different from those of the Delaware specimens, which are 15—22 x 7—8 *u*, one-septate and constricted, while these are 22—50 (mostly 35—50) x 3—5 *u* (mostly 4—5 *u*), probably becoming one-septate, as a few have the endochrome faintly divided in the middle. This species, with *G. Argemonis* and *G. rostratum*, have the elongated, cylindrical spores (conidia) of *Cylindro-*

sporium, but the larger acervuli and the firmly conglutinated mass of ejected spores are of the same character as in *Glœosporium*. In all the genuine species of *Cylindrosporium*, the spores are ejected from the minute and usually numerous acervuli in loosely floccose or pulverulent masses which are usually more or less confluent. *Cylindrosporium Padi*, Karst., belongs in this same category.

GLOEOSPORIUM DIOSPYRI, E. & E.—On leaves of *Diospyrus Virginianus*. Faulkland, Del., August, 1887. A. Commons, No. 606. Acervuli innate, erumpent on the upper side of the leaf on the veinlets of the leaf in small, pale-tuberculiform masses; spores ovate, granular, 6—14 x 5—7 *u*. The leaf is more or less yellow and the part occupied by the fungus dull olive-brown.

GLOEOSPORIUM PRUNICOLUM, E. & E.—On living leaves of *Prunus Virginiana*. Racine, Wis., July, 1887. Dr. J. J. Davis. Maculicola; spots irregular, 3—10 millim. in diameter, dark rusty brown, finally deciduous; acervuli innate, minute; spores elliptical, mostly 4—6 x 2½ *u*, discharged in minute, whitish heaps on both sides of the leaf but more abundantly below.

GLOEOSPORIUM NECATOR, E. & E.—On living canes of black and red raspberry. Sent from Evanston, Ill., by Chas. Wheeler, August, 1881, and from Cobden, Ill., by F. S. Earle, June, 1884; also received from Columbia, Mo., June, 1887, from B. T. Galloway. Spots caulicolous, pale, with slightly raised, dark border, 2—3 millim. in diameter, orbicular or elliptical; spores oblong-elliptical, 5—7 x 3 *u*, oozing out in an amber-colored mass through a single opening in the center of each spot. Reported as being very injurious. *G. Venetum*, Sacc., has spores of about the same size but is a foliicolous species. The Illinois specimens were reported as *Phyllosticta necator*, but the fungus is evidently a *Gloeosporium*.

GLOEOSPORIUM ARGEMONIS, E. & E.—On living leaves of *Argemone platyceras*. Manhattan, Kas., July, 1887. W. T. Swingle. Maculicola; spots amphigenous, definite, suborbicular, dirty gray above, purplish black below and subzonate, mostly about a half cm. in diameter, with a slightly raised, narrow margin; acervuli minute, scattered, mostly erumpent below, discharging the spores in small yellowish and amber-colored heaps; spores subcylindrical, arcuate, hyaline, granular and nucleolate, mostly a little narrower at one end, 22—40 x 2½—3 *u*.

GLOEOSPORIUM ROSTRATUM, E. & E.—On living leaves of *Corylus rostrata*. British Columbia, May, 1887. Prof. John Macoun. Maculicola; spots amphigenous, subrotund, 1—2 millim. in diameter, pale rust color, margin narrow and darker; acervuli minute, mostly clustered in the center of the spots, amber color, epiphyllous; spores cylindrical, curved, 35—45 x 2½—3 *u*, granular and nucleate, with indications of becoming at length three-septate. This is quite different from *G. Coryli* (Desm.), which is mostly hypophyllous and has spores 12—15 x 5—6 *u*.

CYLINDROSPORIUM RANUNCULI (Bon.) f. THALICTRI, E. & E. On fading leaves of *Thalictrum purpurascens*. Manhattan, Ks. W. T. Swingle. Spots amphigenous, irregular, more or less angular, with a narrow, darker margin, dark brown, becoming more or less dirty whitish; acervuli innate, discharging the spores below in small, light-colored heaps; spores filiform, more or less curved, continuous, 30—60x1¼ *u*. Probably *C. Clematidis*, E. & E. (JOUR. MYCOL., III, p. 22) should also be considered as a variety of this species, which is represented and figured by both Bonorden and Saccardo as quite variable in the thickness and length of its spores.

CYLINDROSPORIUM CAPSELLÆ, E. & E.—On living leaves of *Capsella Bursa-pastoris*. Columbia, Mo., May, 1887. B. T. Galloway, No. 253. Spots amphigenous, round (1—4 millim.), mostly a little depressed above, whitish; conidia erumpent above, giving the surface of the spots a farinose appearance, cylindrical, granular, becoming faintly three-septate, the middle septum being more distinct, 35—45 x 3 *u*; hyphæ consisting of slightly elongated cells of the proligerous layer. This is quite a different thing from *Cercospora Cruciferarum*, E. & E.

PHYLLOSTICTA GERANII, E. & E.—On living leaves of *Geranium Carolinianum*. Point a la Hache, La., March, 1887. Langlois, No. 1096. Spots amphigenous, small (1—1½ millim.), round or subangular, whitish above, rusty color below, margin narrow, darker and slightly raised; perithecia few, punctiform, black, erumpent, mostly epiphyllous; sporules subelliptical or suboval, hyaline, 2½—3 x 1 *u*.

PHYLLOSTICTA STILLINGÆI, E. & E.—On leaves of *Stillingia sebifera*. Point a la Hache, La., November, 1886. Rev. A. B. Langlois, No. 847. Spots amphigenous, definite, reddish-brown, not abundant, 2—3 millim. in diameter; perithecia epiphyllous, scattered, few, dark, convex; sporules oblong-elliptical, two-nucleate, hyaline, 5—7 x 2½—3 *u*.

PHYLLOSTICTA YUCCAÆGENA, E. & E.—On leaves of *Yucca*. Florida. W. W. Calkins, No. 773. Spots amphigenous, discoid, oblong or acutely elliptical, concave on both sides and with an obtuse, raised border, 1—2 x ½ cm.; perithecia immersed, large (½ millim.), scattered, amphigenous, sometimes subconfluent, raising and rupturing the epidermis; sporules hyaline, with coarse, granular contents or nuclei, irregularly elliptical and subinæquilateral, ends subacute, 18—22 x 7—8 *u*. The same thing occurs without any spots on younger, thinner leaves (No. 774).

P. Gaultheriæ, E. & E., has been sent by Prof. J. Macoun from British Columbia on leaves of *Gaultheria Shallon*, differing from the New Jersey specimens (on *G. procumbens*) only in the less numerous perithecia and sporules more generally globose.

(To be continued.)